



PATENT  
Customer No. 22,852  
Attorney Docket No. 06478.1462

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:	)	
Jürgen RÖMISCH et. al.	)	
Application No.: 10/033,777	)	Group Art Unit: 1654
Filed: January 3, 2002	)	Examiner: Michael V. Meller
For: STABILIZED LIQUID PREPARATION	)	
OF THE PROTEASE WHICH	)	
ACTIVATES BLOOD COAGULATION	)	
FACTOR VII, OR OF ITS PROENZYME	)	

**Mail Stop Appeal Brief--Patents**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**REPLY BRIEF UNDER 37 C.F.R. § 1.193**

Pursuant to 37 C.F.R. § 1.193, Appellants submit this Reply Brief in triplicate to the Board of Patent Appeals and Interferences in response to the March 9, 2004, Examiner's Answer, in the above-identified application. Appellants have also filed concurrently herewith a Request for Oral Hearing.

If any fees are required, Appellants request that the required fees be charged to Deposit Account No. 06-0916.

**I. Response to Examiner's Answer**

**A. Status of Claims**

The Examiner alleges that the status of claims in this appeal "involves claims 1, 3, 5-21." Examiner's Answer at 2. Appellants respectfully disagree. As outlined in the Appeal Brief, claims 1-24 were originally filed in this application, the Examiner withdrew claims 22-24 as non-elected in the Office Action mailed January 14, 2003, and therefore claims 1-21 are currently pending. See Appeal Brief at 2. Appellants note that the Examiner reviewed claims 1-21 in the Office Action mailed January 14, 2003, at pages 5-6, in the Office Action mailed June 26, 2003, at page 3, and in the Advisory Action mailed October 7, 2003, at page 1. In addition, the "Disposition of Claims" section in each Office Action lists claims 1-21 as rejected. Finally, the Examiner acknowledged Appellants' election of claims 1-21 and withdrew claims 22-24 from consideration in the January 26, 2003, Office Action. Therefore, claims 1-21 are properly included in this appeal.

**B. Examiner's Answer does not Refute that the Basis for the Rejection was Never Properly Communicated.**

Appellants' Appeal Brief relied on *Ex parte Blanc*, 13 U.S.P.Q.2d (BNA) 1383 (Bd. Pat. App. & Inter. 1989), *Ex parte Skinner*, 2 U.S.P.Q.2d 1788 (Bd. Pat. App. & Inter. 1986), and section 706.02(j) of the M.P.E.P. to demonstrate that the Examiner did not meet the initial burden of establishing a *prima facie* case of obviousness, by not properly communicating the basis for the rejection. See Appeal Brief at 7-9. In response, the Examiner does not dispute the relevant principles of *Ex parte Blanc*, *Ex parte Skinner*, or section 706.02(j) of the M.P.E.P. Further, the Examiner does not dispute that there was a failure to supply a proper basis for rejection in any of the three

previous Office Actions. Rather, the Examiner attempts to provide, during this appeal process and for the first time, support for the rejection under § 103, by stating the alleged teachings of the five cited references.

While the Examiner's first attempt to communicate a basis for the rejection provided a cursory recitation of the teachings of the cited references, the Examiner's Answer still fails to explain with a reasonable degree of specificity how the cited references, when combined, render the pending claims obvious. In fact, the Examiner's Answer provided only three sentences describing the "relevant teachings" of the five references relied on as follows:

JP and EP teach that a protease which activates blood coagulation factor VII can be stabilized using sodium citrate, see page 2, bottom of EP.

Sato teaches that tranexamic acid is stabilized using CMC and carragennnan (example 4) and also shows using a protease with it (col. 3, lines 6-23).

Roy and Kessler teach that the other ingredients to be added to the composition, detergents, sugar, amino acid are known in the art to stabilize compositions such as the claimed invention.

Examiner's Answer at 4-5. The Examiner's Answer "is supposed to state with reasonable fullness the examiner's reasons for denying the claims," *In re Donaldson*, 166 F.2d 169, 172, 76 U.S.P.Q. 588, 590 (C.C.P.A. 1948), and describe "the references thoroughly in his Answer so that [the Board] might have the benefit of his interpretation." *In re Surrey*, 319 F.2d 233, 234-235, 138 U.S.P.Q. 67, 70 (C.C.P.A. 1963), *cert. denied*, 375 U.S. 930 (1963). Appellants respectfully submit that the Examiner's minimal statements are unclear and fail to state with reasonable fullness the reasons for the rejection.

The Examiner newly asserts, for instance, that Roy and Kessler "teach that the other ingredients to be added to the composition, detergents, sugar, amino acid are known in the art to stabilize compositions such as the claimed invention." Examiner's Answer at 5. The Examiner fails to discuss the alleged teaching in relation to the claims of the present invention and therefore it is unclear which claims are allegedly rendered obvious by the cited references. There is no mention, for instance,, in Roy or Kessler of any elements encompassed by independent claim 1. It is therefore also unclear what the Examiner means by "such as the claimed invention," as neither Roy nor Kessler teach a composition containing a protease or its proenzyme. Finally, the Examiner does not discuss how Roy or Kessler can be combined with the other references cited to render the claims obvious.

Due to the lack of adequate support of the rejection under § 103, Appellants have not been given a fair opportunity to reply. Accordingly, Appellants respectfully maintain that for at least this reason, the present rejection is in error and should be reversed.

**C. Claims 1-21 are Patentable Under 35 U.S.C. § 103(a)**

The Examiner rejected claims 1-21 under 35 U.S.C. § 103(a) over Japanese Publication No. 2000-023696 or European Patent EP 0 952 215 taken with Sato (U.S. Patent No. 4,465,662) and further in view of Roy (U.S. Patent No. 5,589,363) or Kessler (U.S. Patent No. 5,604,202). See Final Office Action mailed June 26, 2003, at 3. As explained below, the arguments contained in the Examiner's Answer are flawed because (1) the rejection is improperly based on non-analogous art, (2) there is not, even arguably, a motivation or reasonable expectation of success for combining the

references cited by the Examiner, and (3) the components cited in the references are not used for the same purpose as in the claimed invention.

**1. Sato cannot be properly relied on to support the Examiner's rejection as the reference constitutes non-analogous art**

In order to rely on a reference as a basis for rejection, the reference must "either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." *In re Oetiker*, 977 F.2d 1443, 1446, 24 U.S.P.Q.2d (BNA) 1443, 1445 (Fed. Cir. 1992). "A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." *In re Clay*, 966 F.2d 656, 659, (Fed. Cir. 1992).

Appellants submit that Sato is non-analogous art and therefore cannot be used as a basis for the rejection. See Appeal Brief at 11. Sato is directed to tranexamic acid-containing oral compositions having a good feeling during use. Sato, col. 1, lines 6-7. In particular, Sato teaches oral compositions, which include "dentifrices such as toothpastes, toothpowders and liquid dentifrices, liquid oral refreshers such as mouthwashes, solid oral refreshers such as troches, chewing gums, and oral pastes as long as they contain an effective amount of tranexamic acid" Sato, col. 2, ll. 16-22. As the Examiner acknowledges, the tranexamic acid is not a stabilizer, but is itself stabilized. Examiner's Answer at 4. Therefore, this reference is clearly not in the field of the Appellants' endeavor, *i.e.*, stabilizing the protease, or its proenzyme, which activates blood coagulation factor VII. Moreover, the use of tranexamic acid in oral

compositions would not have logically commended itself to the present inventors' attention when considering how to stabilize the protease, or its proenzyme, in liquid preparations administered intravenously. Accordingly, Appellants respectfully request the removal of Sato as it constitutes non-analogous art.

**2. The references fail to provide any suggestion or motivation for their combination**

Even assuming, *arguendo*, that Sato can be used as a basis for the Examiner's § 103 rejection, the Examiner must still show that the prior art provides reason or motivation for their combination to make the claimed compositions in order to establish a *prima facie* case of obviousness. See *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000) (finding that "to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant."); See also *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579, 42 U.S.P.Q.2d 1378, 1383 (Fed. Cir. 1997) (noting that the "absence of such a suggestion to combine is dispositive in an obviousness determination."); M.P.E.P. § 2143.01. In conflict with this well-established principle, the Examiner has not shown (and the cited references do not contain) any disclosure motivating one to combine the references to produce the claimed composition. Specifically, the Examiner does not demonstrate, nor do the references contain, any suggestion or motivation to stabilize the protease or its proenzyme, which activates blood coagulation factor VII, with tranexamic acid.

While JP 2000-023696 and EP 0 922 215 encompass a protease for activating blood clotting factor VII, the Examiner is unable to cite, nor do any of the cited

references contain, any suggestion to combine the protease for activating the clotting factor VII with tranexamic acid. Sato, the only reference cited by the Examiner that discloses tranexamic acid, clearly does not provide this suggestion or motivation. In fact, as described in the Appeal Brief, Sato teaches that tranexamic acid destabilizes the oral composition of the invention. See Appeal Brief at 11.

When characterizing the disclosure of Sato, the Examiner acknowledges that tranexamic acid is itself stabilized by other components. Examiner's Answer at 4. On the following page, however, the Examiner alleges that "it is clear that Sato found the tranexamic acid to stabilize compositions, see example 4." *Id.* at 5 (emphasis added). Appellants respectfully note that in view of the Examiner's own statement, the Examiner misapplied the Sato reference. The text of Example 4, which the Examiner refers to, states that "[t]he results of Table 4 reveals that the aging stability of tranexamic acid-containing oral compositions is improved when CMC and carrageenan are blended at a ration of 6:4 to 10:0." Sato, col. 7, ll. 56-59. Thus, Example 4, as the Examiner acknowledges at page 4 of the Examiner's Answer, demonstrates that CMC and carrageenan stabilize tranexamic acid-containing composition, not that tranexamic acid itself stabilizes compositions. Example 4 only supports Appellants' position that Sato actually teaches away from using tranexamic acid as a stabilizer.

It is reversible legal error to fail to consider the parts of the document that teach away from Appellants' claimed invention, including, in this case, a teaching that is directly opposite to the purpose accorded to the reference. See, e.g. *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988). In the face of the teachings of Sato, one skilled in the art would not be motivated to stabilize a protease for activating blood coagulation factor

VII by combining it with tranexamic acid. Accordingly, there is no suggestion to combine Sato with JP 2000-023696 and EP 0 922 215.

**3. The Examiner has not shown that individual ingredients in the claimed composition can be used individually for the same purpose**

In the Examiner's Answer, the Examiner argues that the rejection under § 103 "was made with a combination of references that show that the individual ingredients of the composition can be used individually in the art for the same purpose, namely to stabilize a composition." Examiner's Answer at 5. Applicants submit that the cited references do not disclose the use of individual ingredients for the same purpose as they are used in the claimed invention. Specifically, Sato does not use tranexamic acid to stabilize the oral compositions of its invention. Rather, Sato used tranexamic acid because it is effective for "periodontosis prophylaxis." Sato, col. 1, ll. 8-13. In fact, Sato discloses that tranexamic acid-containing compositions are unstable. Sato, col. 1, ll. 18-20. Thus, tranexamic acid is not used for "the same purpose" as in Appellants' claimed invention. Hence, the Examiner's basis for the rejection under § 103 fails. Further, the Examiner's Answer does not dispute Appellants' Appeal Brief argument that combining ingredients does not flow logically from their having been used individually in the prior art, even for the same purpose. See Appeal Brief at 10.

There is clearly no basis for the Examiner to assert that there is a reasonable suggestion or motivation to combine the cited references. Roy and Kessler, which do not describe any of the elements of independent claim 1, do not cure the defects cited above. Accordingly, Appellants respectfully maintain that the rejection under § 103 is in error and should be reversed.



**II. Conclusion**

The obviousness rejection should be reversed and withdrawn and claims 1-21 should be allowed.

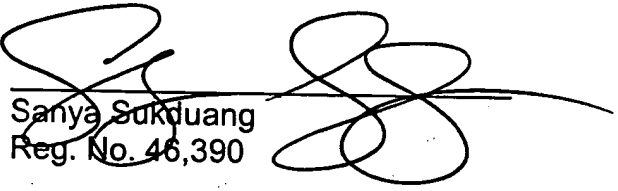
To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this Appeal Brief, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: April 27, 2004

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